What is claimed is:

1. An immune deficient mouse having a human prostate cancer xenograft of locally advanced or metastatic prostate cancer.

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2. The mouse of claim 1, wherein the locally advanced prostate cancer is at stage C.

3. The mouse of claim 1, wherein the metastatic prostate cancer is at stage D.

10   4. A SCID mouse of claim 1.

5. The mouse of claim 1, wherein the xenograft is androgen dependent.

6. The mouse of claim 1, wherein the xenograft is androgen independent.

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7. The mouse of claim 1, wherein the xenograft is androgen dependent in the presence of androgen and is androgen independent in the absence of androgen.

8. The mouse of claim 1, wherein the xenograft is derived from an explant selected
20   from prostate, lymph node, lung or bone tissue.

9. A method of generating a human prostate cancer xenograft that simulates prostate cancer in mice comprising implanting locally advanced or metastatic prostate cancer tissue or cell suspension thereof from a human in an immune deficient
25   mouse and allowing the tissue so implanted to grow.

10. The method of claim 9, wherein the tissue is implanted subcutaneously.

11. The method of claim 9, wherein the xenograft so grown is implanted into a second
30   mouse and allowing the xenograft to grow.

12. A method of simulating the progression of human prostate cancer from primary tumor formation to micrometastasis in an animal model comprising:
    a. generating a human prostate cancer xenograft in an immune deficient mouse by
35   the method of claim 9; and
    b. allowing the xenograft tumor to grow for a time sufficient to permit the detection of prostate cancer cells not within the implant site in the immune deficient mouse.

13. The method of claim 12, wherein the xenograft in (a) is implanted subcutaneously.

14. The method of claim 12, wherein the xenograft in (a) is implanted intraprostatically.

15. The method of claim 12, wherein detection is effected in the peripheral blood of the immune deficient mouse.

16. The method of claim 12, wherein detection is effected in the bone marrow of the immune deficient mouse.

17. A method of simulating the progression of osteoblastic bone metastasis in human prostate cancer comprising:

a. injecting a single cell suspension of prostate cancer cells prepared from a prostate cancer xenograft generated by the method of claim 9 into the tibial bone marrow cavity of an immune deficient mouse; and

b. allowing the injected ells to grow and form an osteoblastic bone lesion which simulates the progression of osteoblastic bone metastasis in human prostate cancer.

18. A SCID mouse produced by the method of claim 9.

19. An assay for assessing the effect of a treatment for human prostate cancer comprising:

(a) applying the treatment to an immune deficient mouse bearing a subcutaneous human prostate cancer xenograft generated by the method of claim 9; and,

(b) determining the effect of the treatment on the growth of the xenograft.

20. An assay for determining the effect of a gene on the progression of micrometastatic prostate cancer comprising:

(a) generating a subcutaneous prostate cancer xenograft in an immune deficient mouse by the method of claim 9;

(b) transducing the cells of the xenograft with the gene in vivo;

(c) evaluating the presence of micrometastasis in the immune deficient mouse by detecting prostate cancer cells in the peripheral blood, bone marrow, lymph nodes or other sites distant from the site of the subcutaneous xenograft;

wherein the effect of the gene on the progression of micrometastatic prostate cancer is determined by reference to a control immune deficient mouse bearing a

subcutaneous human prostate xenograft generated with a untransduced subset of the isolated cells.